

Green synthesis and characterization of silver nanoparticles from *Crassocephalum crepidioides* (Benth.) S. Moore extracts : anticancer and anti-inflammatory potential



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INTRODUCTION

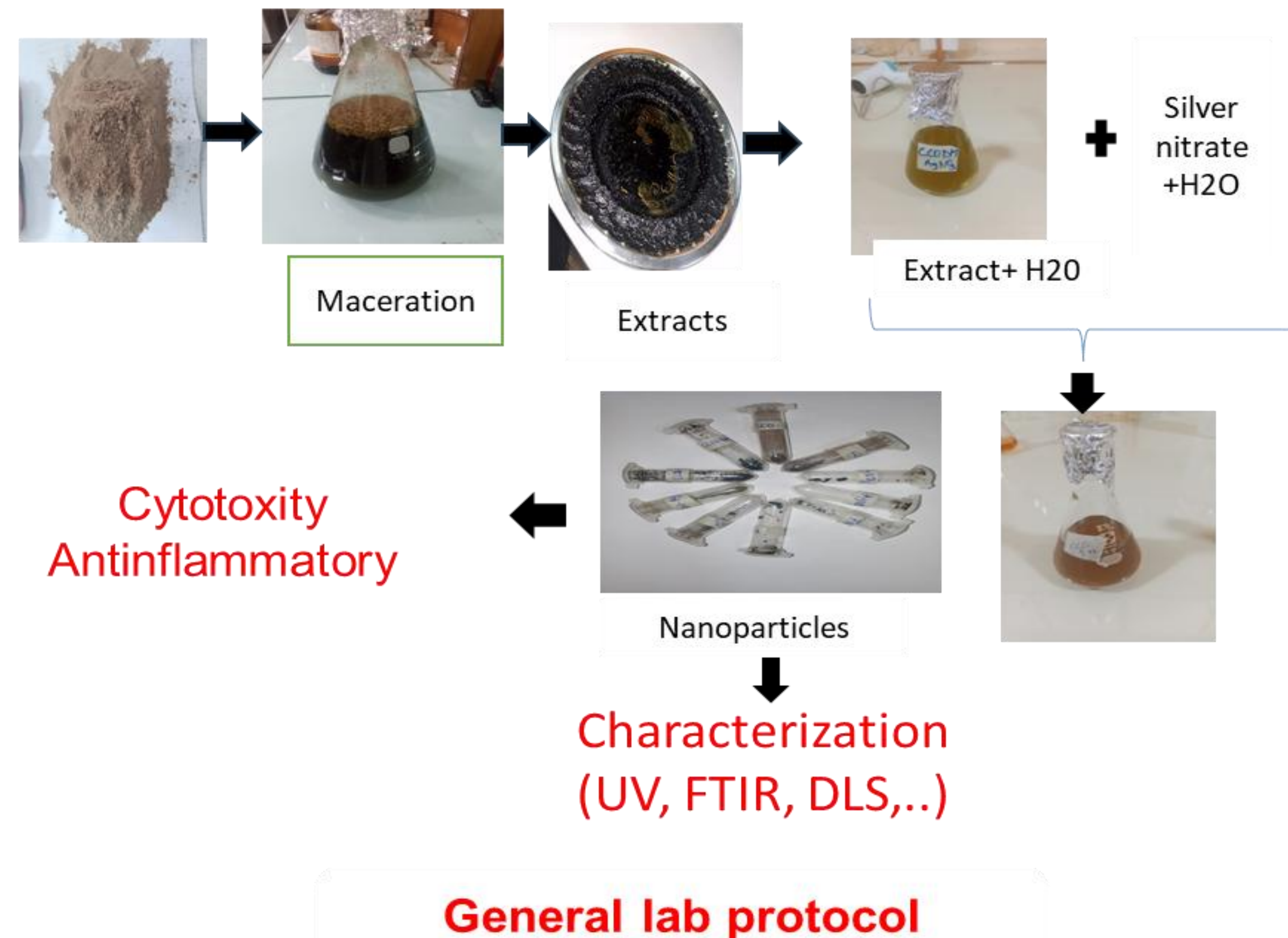
The development of green nanotechnology is of significant interest to researchers due to the enhanced biosafety of nanomaterials. [1] Green synthesis of nanoparticles using plant extracts represents a sustainable alternative for the design of new therapeutic agents [2].

This study explores the high reducing potential of this plant for the synthesis of silver nanoparticles (AgNPs) with optimized biological properties.



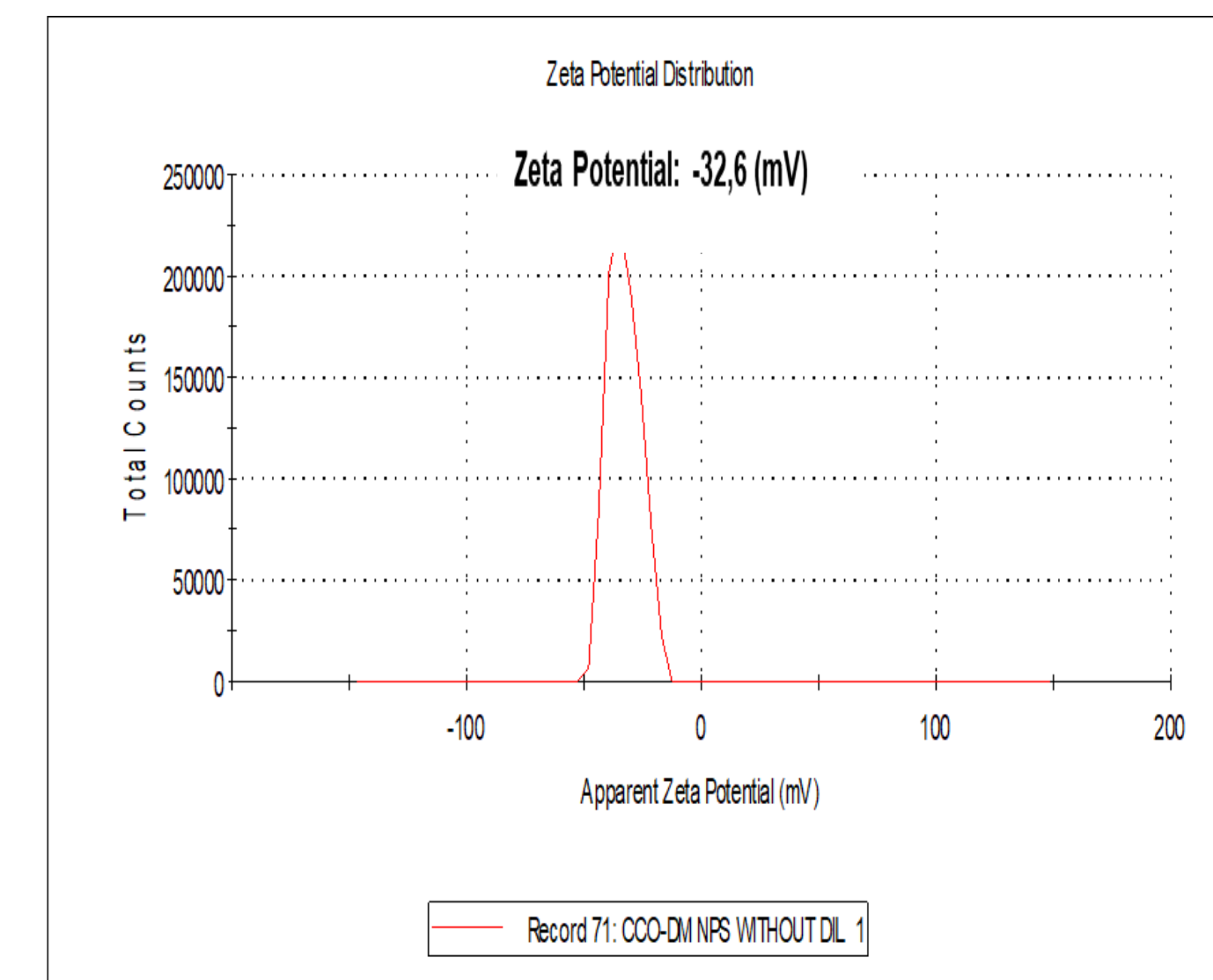
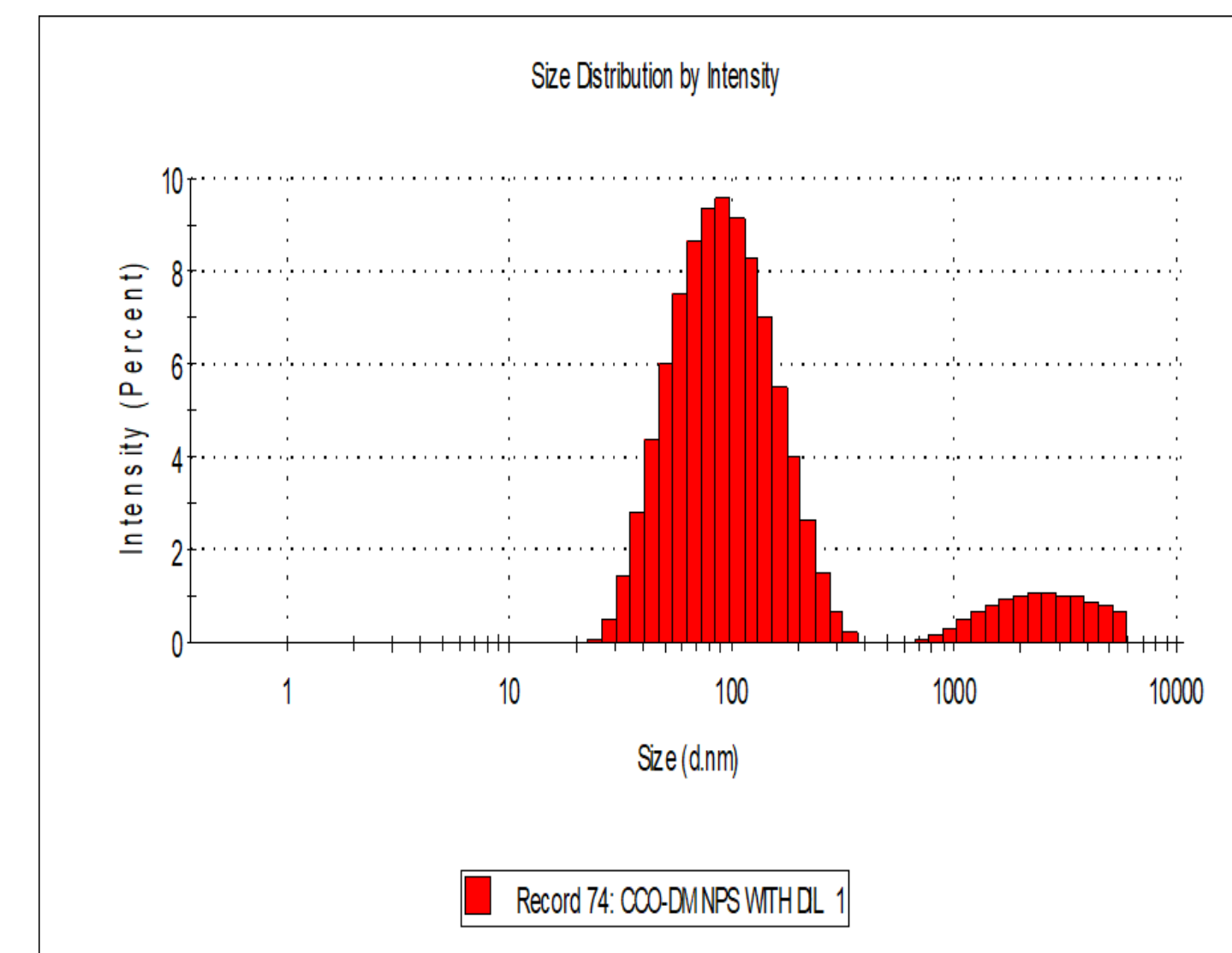
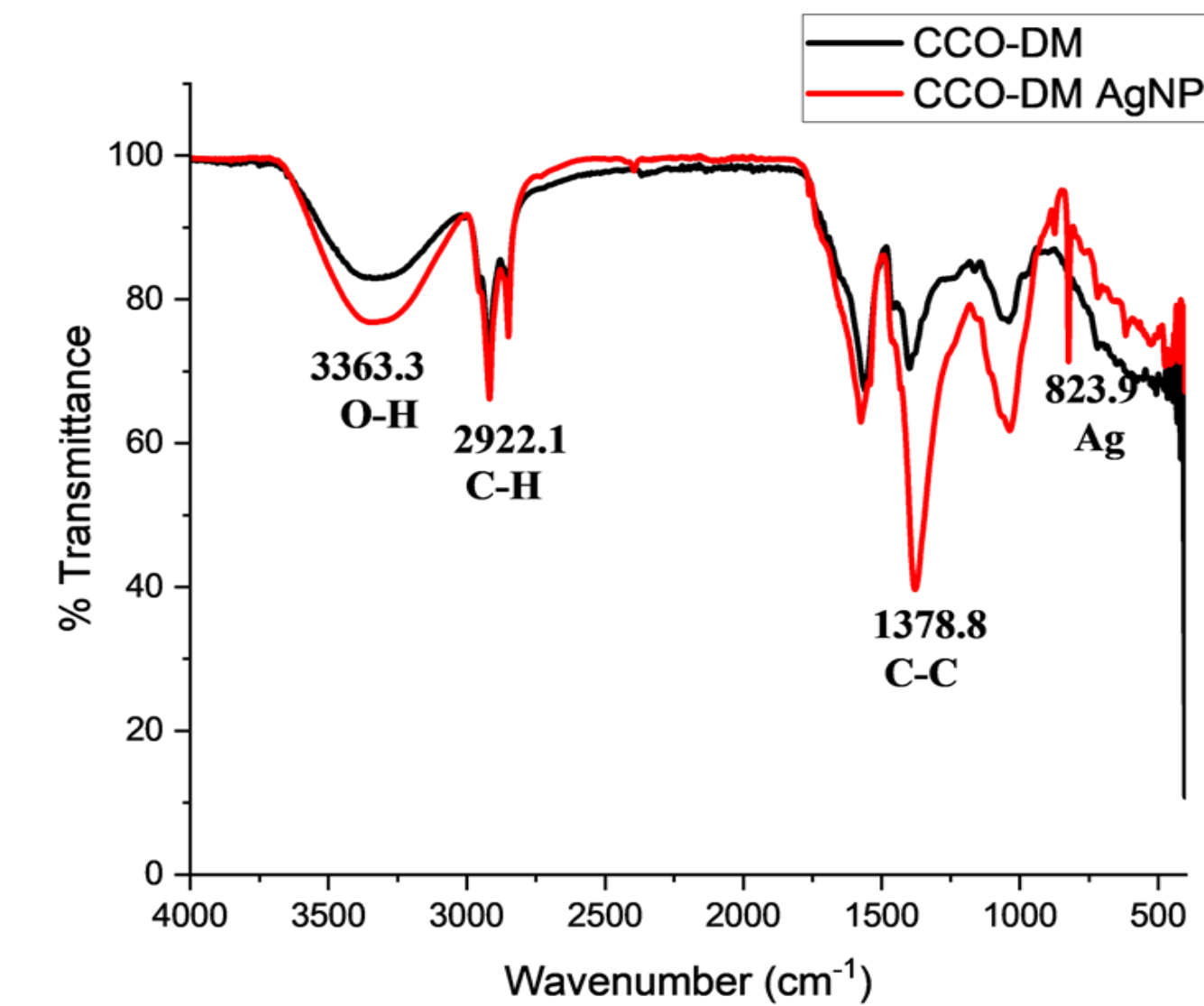
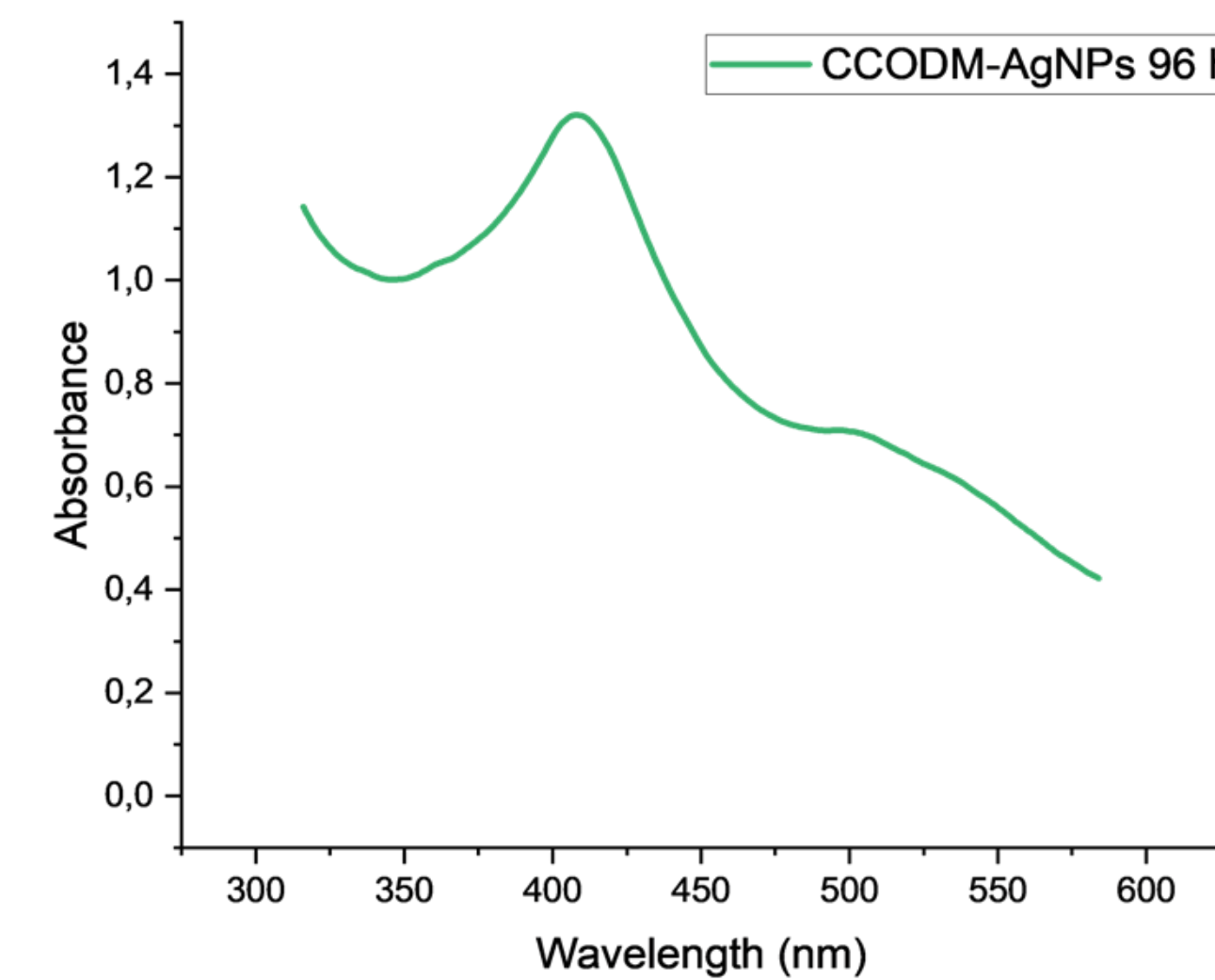
Crassocephalum crepidioides plant [3].

I. METHODS



II. RESULTS

II. 1. Results



II. 3. Anticancer and anti-inflammatory results

Table 1: Citotocitit-y results

	IC ₅₀ µg/mL	Percentage inhibition at 200 µg/mL
CCODM-NPsAg	113,12±3,5	89,37
FHO-NPsAg	33,99±5,0	93,61
FAO-NPsAg	/	44,83
FNO-NPsAg	/	45,72
CCO-NPsAg	25,5±1,1	84,01
STD Doxorubicine	81,81	0,06±0,04

Table 2:: Antiinflammatory results

	IC ₅₀ µg/mL	Percentage inhiibition at 250 µg/mL
CCODM-NPsAg	105,8±14,1	76,36
FHO-NPsAg	155,9±32,8	59,81
FAO-NPsAg	>250	30,69
FNO-NPsAg	127,3±9,9	78,07
CCO-NPsAg	>250	5,81
Ibuprofene 25 µg/mL	73,2±1.4	

CONCLUSION

The CCODM-NPsAg of *C. crepidioides* generates the most stable, bioactive, and least toxic nanoparticles, proving to be the best candidate for biomedical applications. Conversely, the other solvents led to more unstable or less effective particles.

REFERENCES

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